

HEATON NORRIS
URBAN DISTRICT COUNCIL.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

F. W. JORDAN, M.D. (Durham.) D.P.H. (Vict.)

FOR THE YEAR 1897.

*A Summary of the action taken during the year to
prevent the spread of Disease*

The following table gives the incidence of Notifiable Disease in the District :—

WARD	Scarlet Fever.												Totals.	
	Jan.	Feb.	Mar.	May	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	1897	1896
Heaton Chapel	1	0	1	0	0	0	0	0	0	0	0	0	8	14
Heaton Moor East	0	3	1	1	1	0	0	0	0	0	0	0	9	9
Heaton Moor West	0	1	0	1	0	0	0	1	0	0	0	0	1	1
Heaton Mersey	1	0	2	0	0	1	9	25	4	9	0	1	55	15
<i>Total.....</i>	2	4	4	2	1	2	10	26	5	10	1	1	80	46
1897	66												4	
1896	37												2	

Of these cases 31 were sent to Hospital, 29 of them at the expense of the District Council.

An epidemic of Scarlet Fever, commenced in Heaton Mersey at the latter end of September, and the cases soon became numerous. It was of very mild type and some cases were not recognized until disquamation was established, hence the reason of the rapid dissemination of the poison. The spread of the disease being clearly due to intercourse of children at school, I advised the closure of the Day and Sunday Schools for a month, which I afterwards prolonged for another fortnight. I advised also the postponement of a clothing club, and a children's public entertainment, with satisfactory results. All cases arising in houses where isolation could not be practised, were promptly removed to Hospital, and to this I attribute the limited character of the epidemic.

At the re-opening of the schools only 5 houses remained infected. Special precautions were taken to prevent these becoming the source of a fresh outbreak, and the Council on my advice issued a circular recommending a general cleansing of houses.

There was a recrudescence of the disorder to a slight extent. Culpable carelessness as regards isolation was shown in some cases, and in 2 instances we obtained convictions. So far we have had no difficulty in finding suitable Hospital accommodation. In any future discussion of this subject the Council should consider the advisableness of providing a suitable apparatus for disinfecting clothing, bedding, etc., by means of steam; our present methods not being satisfactory for articles which cannot be washed. This suggestion might be carried out by including the conveyance and disinfection of goods from infected houses in such arrangements as may be made with any Hospital Authority for the reception of cases.

*Account of the Sanitary state of the District generally
at the end of the year.*

The District is well lighted and new lamps are introduced where required ; the main roads are looked after and kept in a good condition and seats for the public have been introduced at suitable points; the private roads, which from their nature rapidly get into bad repair, are now enjoying the attention of the Council, and I hope more use will be made of macadam on all our roads than has hitherto been the case, the rattling of wheels over setts makes noises which are most objectionable and irritating to invalids, and also to people who are not ill.

A length of 800 yards of new sewerage has been done to the great advantage of the adjoining residents; our sewage treatment is good, the effluent being described as good by the County Council, and placed among the first 16 authorities.

A considerable amount of drain repairing has been done, and on a better plan than formerly obtained. Cemented joints are more frequently employed now instead of puddle, and new drains are, where it is possible, inspected in their entire length, instead of piecemeal as was formerly the case. Our new Bye-laws will provide also other means for bringing our sanitary arrangements more into accordance with modern ideas. Owing to the energy displayed by the Council, and especially by the Sanitary Committee, defects are remedied and improvements made promptly and efficiently, and all my suggestions are considered and acted upon speedily.

*Account of inquiries made as to conditions injurious to
health existing in the District, and the proceedings in
which the Medical Officer of Health has taken part, or
advised under the Public Health Act, 1875.*

Investigations have been made into complaints and other matters which may be classed as follow:—

1. Drain defects.
2. Manure, vegetable and ashpits.
3. Water supply.
4. Infectious Disease.
5. Works and factories of the District. (by the Surveyor)
6. Black smoke. (by the Surveyor)

Special Reports : On the state of the Black brook.

- „ „ „ Water supply.
- „ „ Vegetable refuse of shops.
- „ „ Ashpits
- „ „ Inspection of Cow-sheds and other milk places.
- „ Overcrowding.
- „ the Scarlet Fever epidemic.

1.—DRAIN DEFECTS.

Numerous. These arise from the plan of the work being defective in the first instance, or from the work being badly done; all which would be avoided if drains were better exposed to the light of inspection, if thoroughness were applied in their construction, and if the smoke test were used systematically. These remarks apply universally and not specially to our District.

Drain leakages are answerable for a large amount of sickness, though it is often difficult to prove this, but experiments have been made which shew that morbid germs may lie dormant and harmless as long as they are not fed, but if organic matter such as the contents of drains is supplied, then these germs grow, develope, and become ripe for mischief.

BLACK BROOK.

This stream for a long time has been a standing disgrace to those responsible for its condition. I hope the County Council will be able to remove this nuisance, we have done all we can ourselves, and the matter now rests with the Joint Committee.

WATER SUPPLY.

On four occasions at least the water has been turbid to an extent to make it unpleasant, and though it is satisfactory to know that analysis shows it to be free from sewage contamination, yet it is not nice to have to drink muddy water, especially in these days of progress. Certainly we have not had the serious turbidity to complain of this year that we had in 1896, and now when it does occur it is of very trifling character. I have been informed of the method of supply of this District with water from the reservoir of the Manchester Corporation at Godley, and I am satisfied that past delinquencies rest more on the shoulders of the Corporation Officials at Godley, than on those of the Stockport Water Company. Arrangements have now been made by this Company whereby complaints of water pollution are less likely to arise. Earlier arrangements and a prompt explanation on the part of the Water Company would have saved a great deal of discussion and dissatisfaction.

ASHPITS.

We are gradually removing all those privies and ashpits which in old property are constructed in immediate contact with the house, as they are obviously a constant source of danger.

COW SHEDS AND OTHER MILK PLACES.

These have been minutely inspected, some of them on two occasions, and we have effected some improvement.

Farmers are evidently very conservative in their ideas, and it is difficult to convince them of the error of their ways; probably the majority do their best with the means at their disposal. But knowing as we do the extreme value of fresh air, ventilation and light, and of dry, airy buildings, and of well drained subsoil, it must be confessed that some old-fashioned farm-steads do not come up to a modern standard of excellence.

Twelve samples of milk were analysed during the year, and were all reported by the County Analyst to be genuine. Placards and copies of regulations have been sent to all milk dealers, so in future they will not be able to plead ignorance of what is required.

One specimen of water supplied to a farm was analysed and reported by the chemist to be fit for cattle but not for domestic use.

SCARLET FEVER.

Remarks have already been made on this subject. My reports refer chiefly to the progress of the epidemic; the prompt removal of cases was our chief factor in dealing with it; disinfection was thoroughly applied and lime washing; suggestions concerning infection were issued broadcast. In spite of all this, fresh cases kept cropping up which were difficult to account for; there were some return cases, as there are in all epidemics, which cannot at present be explained. The type of disease was very mild, so that some children were not laid up, and illness was not suspected until disquamation set in. Measles was assigned as the illness in a few cases, until medical opinion decided differently. One case of exposure we could not deal with on this account. If Measles were notifiable this difficulty of dealing with Infectious disease would be removed, besides being beneficial in other respects.

*Tabular statement of mortality within the District,
classified according to Diseases, Ages, and Localities.*

The area of the District is 1638 acres, and the population at the middle of 1897, 9010, and at the end of 1897, 9155. During the year 90 deaths were reported; of these 9 occurred at Mauldeth Hospital for Incurables, viz:— 4 males and 5 females, and one death occurred at the Infectious Diseases Hospital, in the case of a boy, removed from Heaton Mersey. The Coroner held two inquiries. The number of deaths to be accounted for is thus 82, viz:— 31 males and 51 females, as compared with 63 and 49, respectively, last year. 82 deaths are equal to a death rate of 8·95 per 1000 of population.

The deaths in each month were:—

January	4	April	4	July	5	October	7
February	11	May	7	August	6	November	7
March	9	June	5	September	5	December	12

The births were 133, viz., 71 males and 62 females as compared with 56 and 69, respectively, last year. 133 births are equal to a birth rate of 14·52 per 1000 of population.

The following table gives the particulars for each Ward.

Ward	P'lation	No. of Deaths		Death Rate	No. of Births.		Birth Rate.
		M.	F.		M.	F.	
Heaton Chapel	1959	7	9	8·16	15	11	13·27
Heaton Moor East	2118	4	14	8·49	9	11	9·44
Heaton Moor West	1999	8	11	9·50	10	11	10·50
Heaton Mersey	3079	12	17	9·41	37	29	21·43
Whole District.....	9155	82		8·95	133		14·52

The following table gives the number of deaths at all ages, and from the principal diseases.

		Mortality from all causes at subjoined ages.						Mortality from subjoined causes distinguish- ing deaths of children under 5 yrs. of age.													
WARD		At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards		Diphtheria	Enteric Fever.	Puerperal Fever	Whooping Cough	Diarrhoea.	Rheumatic Fever	Phthisis	Bronchitis, Pneu- monia and Pleurisy	Heart Disease	Influenza	All other diseases	Totals
Heaton Chapel Ward	16	0	0	0	0	0	9	7	Under 5 and upwards..	0	0	0	0	0	0	0	0	0	0	0	0
Heaton Moor East Ward ...	18	1	0	1	0	8	8	8	Under 5 and upwards..	0	0	0	0	0	0	0	1	0	0	0	1
Heaton Moor West Ward ...	19	2	0	1	3	13	0	0	Under 5 and upwards..	0	0	0	0	0	0	0	0	0	0	2	2
Heaton Mersey Ward	28	8	3	0	1	8	8	8	Under 5 and upwards..	0	0	0	1	1	0	0	2	0	0	7	11
Deaths occurring outside the Dist. of persons belong- ing thereto	1	0	1	0	0	0	0	0	Under 5 and upwards..	1	0	0	0	0	0	0	0	0	0	0	1
Total ...	82	11	4	2	4	38	23	23	Under 5 and upwards..	1	0	0	1	1	0	0	3	0	0	9	15
Deaths occurring within the District of persons not be- longing thereto viz: at Mauldeth Hospital	9	0	0	0	0	8	1	1	Under 5 and upwards..	0	0	0	0	0	0	0	0	0	0	0	0

Of children under 1 year, 11 deaths are recorded. This is equal to an infant mortality of 88·7 per 1000 births, or 13·4 per cent of the total deaths.

Of children aged 1 year and under 5, there are 4 deaths recorded. This is equal to 4·8 per cent of total deaths.

There were 8 deaths from the ordinary infectious diseases. This is equal to a death rate of 0·8 per 1000 of population.

The following table gives these figures along with those of previous years.

Year	Population.	Death-Rate.	Birth-Rate	Infant Mortality	Zymotic Death-Rate
Average of 10 years 1882-91...	6672	11·52	20·23	19·80	1·26
1891	7150	10·76	17·77	11·68	1·12
1892	7440	13·03	18·80	17·52	0·67
1893	7500	13·70	16·40	15·63	1·46
1894	8000	10·37	21·75	18·00	1·00
1895	8172	11·50	17·74	18·00	0·36
1896	8235	13·60	15·17	18·70	0·72
1897	9155	8·95	14·52	13·40	0·80

The following table gives the number of deaths at various age-groups compared with previous years.

Year	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards
1892	97	17	7	6	2	41	24
1893	103	16	7	14	8	35	23
1894	83	15	10	2	1	35	20
1895	94	17	9	4	5	39	20
1896	112	21	5	6	7	36	37
1897	82	11	4	2	4	38	23

The following table shews the number of deaths from the ordinary infectious diseases.

	Average for 10 years, 1882-91.	1891	1892	1893	1894	1895	1896	1897
Measles	1·3	1	0	0	6	0	0	0
Scarlet Fever	1·0	3	0	3	0	1	3	0
Diphtheria	1·0	0	2	4	1	2	0	2
Whooping Cough ...	1·7	2	3	1	0	0	1	1
Enteric Fever	1·5	1	0	1	1	0	2	1
Diarrhœa	2·0	1	0	3	0	0	0	3
Puerperal Fever	0	0	0	0	0	0	0	1
<i>Total.....</i>	8·5	8	5	12	8	3	6	8

The following table shews the mortality from certain classes of disease, the proportion to population, and to 100 deaths.

	Total Deaths	Deaths per 1000 of population	Proportion of Deaths to 100 Deaths.
Seven principal Zymotic Diseases..	8	0·8	9·75
Bronchitis and Pneumonia, not including Phthisis.....	15	1·63	18·27
Tubercular Diseases, (Phthisis, Scrofula, Rickets, Tabes).....	10	1·09	12·18
Wasting Diseases (Atrophy, Debility, and Premature Birth)	2	0·22	2·43
Convulsive Diseases	1	0·11	1·21

These figures are in all respects more favourable than those of last year, It is remarkable that we had no deaths from Scarlet Fever.

METEOROLOGICAL REPORT, 1897.

JANUARY—This month commenced with rain and storm, and on the whole was cheerless, moist and cold. The first 10 days were dull and showery, wind varying from S.E. to S.W. We then had a few days fine and frosty, the wind being N.E. The last 10 days were bright with a good deal of snow and rain and N.W. winds. Dense fog on 2 occasions. There were two short depressions of the Barometer, viz: on 22nd and 25th, in which stormy weather prevailed.

FEBRUARY.—On the whole was wet, warm and dull, the wind varying between N.W. and S. There were a few bright days, 3 of them were lovely with typical spring weather. There was a slight depression on the 20th in the early hours of the morning, accompanied by a severe gale from the N.W. which commenced suddenly. Dense fog on 2 days.

MARCH—The sudden fall of the Barometer at the end of February became very marked on the 3rd, and was accom-

panied by a storm of short duration. We had several slight depressions with high winds S.W. and N.W., and a little thunder on the 10th. On the whole the weather during the month was warm, bright and wet.

APRIL—The weather was bright, cold and frosty, and at the beginning and end of the month, fine. On the 14th and 16th, we had stormy weather, winds, W.N.W., with thunder and heavy rains, a slight thunderstorm again on the 29th.

MAY—On the whole we had beautiful weather and less violent changes than in previous months. The barometric curve was less marked by zig-zags, there was a fair amount of rain. After the stormy weather about the 10th, for a fortnight we had charming weather, rather too hot perhaps, with E.S.E. winds. At the close rain returned with thunderstorm on the 28th.

JUNE—Was a very wet month, a large amount of rain, 4.225 in. fell in 20 days. The weather on the whole was hot moist, and not very bright. We had 3 short spells of beautiful weather viz: part of the first week, part of whit-week, and a few days at the latter end. Thunder at the beginning and end, stormy on the 16th, (when a fire was very agreeable to sit by) and 29th.

JULY—In this month we had some beautiful weather. It was stormy on the 4th, 5th, 6th and 7th, and there was thundery weather with heavy showers towards the end. The barometric curve, with the exception of a depression referred to above, was undulating with large waves.

AUGUST—The weather was bright, warm and wet. The barometric curve here, too, was undulating, but the curve was broken up into a series of small angular waves implying unsettled weather. A good deal of rain fell on 26 days. Severe thunderstorms on 5th, 6th, (hail) 11th and 31st.

SEPTEMBER—On the whole was wet and cool. We had a spell of fine weather from 6th to 15th, with a high barometer. Before, and also after this, we had unsettled weather with much rain and some hail, interspersed with bright, warm days, and occasionally sunny.

OCTOBER—The first half of the month was unsettled, bright and warm, with a gradual falling barometer. Stormy on the 10th and 17th, after this, a gradual rise with fine, bright, sunny, warm weather.

NOVEMBER—The fine weather of last month was continued into November for a week, after this the weather was showery but bright, and at times sunny with a high barometer. At the latter end, the weather was not so pleasant. It became cool, moist and foggy, and on the 28th it was stormy with thunder and lightning, and a little snow fell.

DECEMBER—The first half was dull and wet, sometimes warm, mostly cold. The weather was stormy round the 7th, and again on the 14th and 15th, after that, the mercury gradually rose to a high figure, reaching its acme on the 21st, the weather being charming. A falling barometer now brought in its train weather which was dull, wet and windy, and like a candle that flares up just before it expires, the year 1897, on the last day of its existence was bright, sunny and warm. Dense fog was observed on 2 days.

	Mean Reading of Barometer.		Mean daily temperature.		Rainfall in inches	
	1896	1897	1896	1897	1896	1897
1st Quarter ..	30·100	29·667	41·3	40·1	6·755	5·510
2nd Quarter ..	30·095	29·925	53·2	50·4	5·805	7·510
3rd Quarter..	29·797	29·918	57·2	59·0	9·735	9·635
4th Quarter...	29·855	30·042	40·8	45·7	8·575	9·660
	29·962	29·888	48·1	48·8	30·870 on 204 days	32·315 on 201 days

The barometric pressure was lower than that of last year during the first half, and higher in the second half of the year, the range being from 28·618 in March, to 30·687 in November. The mean daily temperature exhibited the same variation, reaching its maximum 66·4 in the fourth week in June, though the highest single observation in the shade was 84·5 in August. August was the hottest month with a mean daily temperature of 60·6, the temperature at night went down to 46·4, and on the grass to 39·0. The lowest temperature during the year was 7° on the grass in February. The greatest amount of sun heat was registered in July, viz: 134·0.

The rainfall was 1·445 greater than last year, but there were 3 fewer wet days. November was the wettest month with 4·705 inches, which fell on 15 days, though August nearly approached it. The greatest fall on any one day was 1·550 inch on November 30th. No one month was particularly fine, October had the fewest wet days, viz: 9, and August the most, viz: 25.



Taken at 9 a.m. daily, by F. W. JORDAN, M.D.

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